

In the Claims:

C/ Claim 3 (amended). A semiconductor component, comprising:

a semiconductor body having:

first and second main sides;

four doped regions with conductivities having alternating signs formed one above another between said first and second main sides;

a gate electrode disposed on said first main side;

a source contact;

a drain contact;

one of said four doped regions being a weakly doped first base region with a given conductivity type;

another of said four doped regions being a second base region having a conductivity type with an opposite sign with respect to said given conductivity type, said second base region extending as far as said first main side, having a channel and having said gate electrode for controlling said channel;

2/ two remaining regions of said four doped regions being respectively connected to one of said source contact and said drain contact;

said source contact being connected to said second base region and being disposed on said first main side;

a buffer layer being doped to have said given conductivity type, said buffer layer being disposed between said first base region and one of said two remaining regions connected to said drain contact;

said first base region being dimensioned and a magnitude of a doping of said buffer layer being chosen such that, in an operating state in which the semiconductor component effects blocking in a direction from said source contact toward said drain contact, at least in an envisaged range of applied electrical voltages, a space charge zone present in said first base region is formed in a manner extending at least as far as said buffer layer; and

a further buffer layer being doped to have said given conductivity type and being disposed between said first base region and said second base region, a doping of said further buffer layer having a magnitude causing the semiconductor

c/ component to block in a direction from said drain contact toward said source contact in an envisaged range of opposite applied electrical voltages.

c2 Claim 5 (amended). A semiconductor component, comprising:

a semiconductor body having:

first and second main sides;

a gate electrode disposed on said first main side;

a source contact;

a drain contact disposed on said second main side;

a first base region having a weak doping with a given conductivity type;

a second base region having a conductivity type opposite said given conductivity type and a channel, said second base region extending from said first main side into said semiconductor body and having said gate electrode for controlling said channel;

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a third region having a conductivity type opposite said given conductivity type and being connected to said drain contact;

a fourth region having said given conductivity type and being connected to said second base region;

said source contact being disposed on said first main side and being connected to said fourth region and to said second base region;

a buffer layer being doped to have said given conductivity type, said buffer layer being disposed between said first base region and said third region;

a further buffer layer being doped to have said given conductivity type and being disposed between said first base region and said second base region;

said first base region being dimensioned and a magnitude of a doping of said buffer layer being chosen such that, in an operating state in which the semiconductor component effects blocking in a direction from said source contact toward said drain contact, at least in an envisaged range of applied electrical voltages, a space charge zone present in said first base region is formed in a manner extending at least as far as said buffer layer; and

ca a doping of said further buffer layer having a magnitude causing the semiconductor component to block in a direction from said drain contact toward said source contact in an envisaged range of opposite applied electrical voltages.
